



### Description

23 AWG Shielded Twisted Pair, High Performance Cable

### Applicable Standards

- ETL Listed CMR Type FTP
- C(ETL) listed FT4 FTP
- ETL Verified to TIA - 568-C.2, and ISO/IEC 11801
- ROHS Compliant
- ATM 155 Mbps
- Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
- 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

### Physical Characteristics

Number of Conductor Pairs	4
Size	23 AWG
Stranding	Solid
Conductor Material	Solid Annealed Bare Copper
Shield Material	Al Foil Shield
Rip Cord	Yes
Insulation Material	Polyethylene
Insulation Overall Diameter	0.045 in. ± 0.0002 in.
Insulation Average Thickness	0.0106 in.
Jacket	Flame Retardant PVC
Outer Jacket Average Wall Thickness	0.0236 in.
Outer Jacket Nom. O.D.	0.2992 in. ± 0.008 in.
Nominal Weight	42 lbs.

### Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Tensile Strength	Before	> = 13.8 Mpa
	Aging	> = 100%
Elongation		100°C x 168 hours
	After	> = 85% of unaged
Aging Condition		> = 50% of unaged
	After	

### Color Code

Pair 1	White/Blue	Blue
Pair 2	White/Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown

### Cable Marking

CATEGORY 6E 550MHZ 23AWG 4 PR FTP  
XXXXXXX CMR C(ETL)US ETL  
LISTED & VERIFIED TO TIA- 568-C.2 \*\*\*\*FT

### Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.03	20.0	74.3	72.3
4	3.87	23.0	65.3	63.3
10	5.95	25.0	59.3	57.3
16	7.55	25.0	56.2	54.2
20	8.47	25.0	54.8	52.8
25	9.51	24.3	53.3	51.3
31.25	10.67	23.6	51.9	49.9
62.5	15.38	21.5	47.4	45.4
100	19.80	20.1	44.3	51.3
200	28.98	18.0	39.8	37.8
250	32.85	17.3	38.3	36.3
300	34.00	20.1	40.2	38.2
350	37.00	19.8	39.2	37.2
400	39.70	19.5	38.3	36.3
450	42.10	19.2	37.5	35.5
500	44.90	19.0	36.8	34.8
550	47.30	18.8	36.2	34.2
Frequency (MHz)	ELFEXT Min. (dB)	PS-ELFEXT Min. (dB)	Delay (Max) (ns/100m)	ACR (dB)
1	67.80	64.80	570.00	72.70
4	55.76	52.76	552.00	61.40
10	47.80	44.80	545.38	53.35
16	43.72	40.72	543.00	48.69
20	41.78	38.78	542.05	46.31
25	39.84	36.84	541.20	43.82
31.25	37.90	34.90	540.44	41.21
62.5	31.88	28.88	538.55	31.98
100	27.80	24.80	537.60	24.50
200	21.78	18.78	536.55	10.80
250	19.84	16.84	536.28	5.40
300	21.20	18.20	-	-
350	19.90	16.90	-	-
400	18.70	15.70	-	-
450	17.70	14.70	-	-
500	16.80	13.80	-	-
550	15.90	12.90	-	-

\* Values above 250MHz are information only

### Electrical Characteristics

Maximum Conductor DC Resistance @ 20°C	≤ 9.38 Ω/100 Meters
Maximum DC Resistance Unbalanced @ 20°C	≤ 5%
Maximum Pair-to-Pair Ground Capacitance Unbalanced	≤ 330 pF/100 Meters
Characteristic Impedance (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	≤ 5.6 nF/100 Meters
Maximum Delay Skew	≤ 45 ns/100 Meters

### Part Numbers

Part #	Color	P
	Blue	1,000' Pull Box
	Grey	1,000' Pull Box
	White	1,000' Pull Box